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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,606	12/14/2000	Gerard Hartnett	P66021US0	5782

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WASHINGTON, DC 20004

EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 07/15/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/735,606

Applicant(s)
HARTNETT

Examiner
VAN H. NGUYEN

Art Unit
2126



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Dec 14, 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-13 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 6) ☐ Other:

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DETAILED ACTION

1. This Office Action is in response to the application filed on December 14, 2000. Claims 2-13 are presented for examination.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 13:

- the limitations "the framework" (line 6), "said services" (lines 10-11) lack antecedent basis.
- the limitation "telecommunication services" (lines 9-10) is vague and indefinite.

Dependent claims 2-12 are rejected for fully incorporating the deficiencies of their base claim.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hayes-Roth et al.** "*Distributed Intelligent Control and Management: Concepts, Methods and Tools for Developing DICAM Applications*", Software Engineering and Knowledge Engineering, 1992, pages 235-244.

As to **claim 13**, Hayes-Roth teaches a control framework (*framework... for building controllers*; page 236, left column, second paragraph) for control of telecommunication services, the control framework comprising an application domain level (*the domain controller*; page 237, right column, second paragraph and fig.3) comprising control logic domain objects having object classes (*contains several modular functions*; page 237, right column, second paragraph), characterized in that the control framework further comprises, a meta level (*the meta-controller*;

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page 237, right column, second paragraph and fig.3) comprising meta objects which represent the domain object classes and comprise means for interfacing with the telecommunication services to isolate the domain objects from the telecommunication services (*meta-controller...this controller utilizes three basic functions to determine on a cyclical basis which pending action is best to execute next*; page 238, left column, third paragraph and fig.3).

Hayes-Roth does not explicitly use the term “*a telecommunication controller*,” Hayes-Roth, however, teaches *distributed intelligent control and management applications* (page 235, left column, second and third paragraphs). It would have been obvious to apply the teaching of Hayes-Roth for the telecommunication controller in order to provide a means for generating high performance controllers for a wide variety of applications.

As to claim 3, Hayes-Roth teaches the meta objects are structured in a hierarchy of abstract classes for declaring actions and attributes (fig. 2).

As to claim 4, Hayes-Roth teaches wherein the meta objects comprise means for invoking actions on domain objects and changes to attributes of domain objects (page 238, left column, third paragraph).

As to claim 5, Hayes-Roth teaches the controller comprises a key class naming objects in the domain level (fig.3).

As to claim 6, Hayes-Roth teaches the meta level defines containment of domain level objects and the domain level comprises means for automatically notifying the meta level of containment modification (page 238, left column, first and second paragraphs).

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As to claim 7, Hayes-Roth teaches means for interrogating a base object containment hierarchy to locate a required object in response to a request from a requesting object (fig.2).

As to claim 8, Hayes-Roth teaches the meta objects comprise means for performing persistence data operations transparently to the domain objects (page 238, left column, second paragraph).

As to claim 9, Hayes-Roth teaches the meta objects comprise means for updating a data backup controller for fault tolerance transparently to the domain objects (page 238, left column, first and second paragraphs).

As to claim 10, Hayes-Roth teaches means for verifying base object proposals to update real resource attributes (page 238, left column, first and second paragraphs).

4 Claims 2, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayes-Roth in view of **Rubin** (U.S. 5,155,842) cited by Applicant in IDS paper #3.

As to claim 2, Hayes-Roth is silent on “the meta objects comprise event channels for automatic notification to subscribers.”

Rubin teaches the meta objects comprise event channels for automatic notification to subscribers (*notifying programs that a logical event has occurred on a network*; abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Rubin with Hayes-Roth because it would have provided

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the capability for monitoring logical events on a network and performing a function call to alert all users of the occurrence of the event.

As to claim 11, Hayes-Roth is silent on “means for publishing events on channels to notify adapter objects.”

Rubin teaches “means for publishing events on channels to notify adapter objects (abstract).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Rubin with Hayes-Roth because it would have provided the capability for monitoring logical events on a network and performing a function call to alert all users of the occurrence of the event.

As to claim 12, Hayes-Roth teaches the adapter objects are contained in a services level in the controller (fig.3).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-Ditmer et al.	US 6490620	issued date 12/2002
-Wickham et al.	US 6307546	issued date 10/2001
-Ismael et al.	US 6061742	issued date 05/2000

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-Henderson et al. US 6058103 issued date 05/2000

- Wang et al. "A Neural Network Architecture for the General Problem Solver." Neural Networks, 1991, pages 1681-1686.

- Reshef et al. "A Framework for Type System Definition and Manipulation in C++" Electrical and Electronics Engineers in Israel, 1995, pages 1-5.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

Any response to this action should be mailed to:

**Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450**

or fax to:

(703) 746-7239 (for formal communications intended for entry)

(703) 746-7238 (for After Final communications)

(703) 746-7140 (for informal or draft communications)

**Van Nguyen
July 12, 2003**



**JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
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